SEQUENCE LISTING

<110> Hallenbeck, Paul
Chen, Cheauyun Theresa

<120> ADENOVIRAL VECTORS INCLUDING DNA SEQUENCES ENCODING ANGIOGENIC INHIBITORS

<130> 4-30899P1

<140> US 09/373,938
<141> 1999-08-13

<160> 17

<170> PatentIn version 3.1

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Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
1               5                   10                  15

ggt tcc act ggt gac gcg gcc cat act cat cag gac ttt cag cca gtg       96
Gly Ser Thr Gly Asp Ala Ala His Thr His Gln Asp Phe Gln Pro Val
            20                  25                  30

ctc cac ctg gtg gca ctg aac acc ccc ctg tct gga ggc atg cgt ggt      144
Leu His Leu Val Ala Leu Asn Thr Pro Leu Ser Gly Gly Met Arg Gly
        35                  40                  45

atc cgt gga gca gat ttc cag tgc ttc cag caa gcc cga gcc gtg ggg      192
Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala Val Gly
    50                  55                  60

ctg tcg ggc acc ttc cgg gct ttc ctg tcc tct agg ctg cag gat ctc      240
Leu Ser Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln Asp Leu
65                  70                  75                  80

tat agc atc gtg cgc cgt gct gac cgg ggg tct gtg ccc atc gtc aac      288
Tyr Ser Ile Val Arg Arg Ala Asp Arg Gly Ser Val Pro Ile Val Asn
                85                  90                  95

ctg aag gac gag gtg cta tct ccc agc tgg gac tcc ctg ttt tct ggc      336
Leu Lys Asp Glu Val Leu Ser Pro Ser Trp Asp Ser Leu Phe Ser Gly
            100                 105                 110

tcc cag ggt caa gtg caa ccc ggg gcc cgc atc ttt tct ttt gac ggc      384
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Ser Gln Gly Gln Val Gln Pro Gly Ala Arg Ile Phe Ser Phe Asp Gly
        115                 120                 125

aga gat gtc ctg aga cac cca gcc tgg ccg cag aag agc gta tgg cac      432
Arg Asp Val Leu Arg His Pro Ala Trp Pro Gln Lys Ser Val Trp His
    130                 135                 140

ggc tcg gac ccc agt ggg cgg agg ctg atg gag agt tac tgt gag aca      480
Gly Ser Asp Pro Ser Gly Arg Arg Leu Met Glu Ser Tyr Cys Glu Thr
145                 150                 155                 160

tgg cga act gaa act act ggg gct aca ggt cag gcc tcc tcc ctg ctg      528
Trp Arg Thr Glu Thr Thr Gly Ala Thr Gly Gln Ala Ser Ser Leu Leu
                165                 170                 175

tca ggc agg ctc ctg gaa cag aaa gct gcg agc tgc cac aac agc tac      576
Ser Gly Arg Leu Leu Glu Gln Lys Ala Ala Ser Cys His Asn Ser Tyr
            180                 185                 190

atc gtc ctg tgc att gag aat agc ttc atg acc tct ttc tcc aaa tag      624
Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ser Phe Ser Lys
        195                 200                 205


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<213>  Mus musculus

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Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
1               5                   10                  15


Gly Ser Thr Gly Asp Ala Ala His Thr His Gln Asp Phe Gln Pro Val
            20                  25                  30


Leu His Leu Val Ala Leu Asn Thr Pro Leu Ser Gly Gly Met Arg Gly
        35                  40                  45


Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala Val Gly
    50                  55                  60


Leu Ser Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln Asp Leu
65                  70                  75                  80


Tyr Ser Ile Val Arg Arg Ala Asp Arg Gly Ser Val Pro Ile Val Asn
                85                  90                  95


Leu Lys Asp Glu Val Leu Ser Pro Ser Trp Asp Ser Leu Phe Ser Gly
            100                 105                 110
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```
Ser Gln Gly Gln Val Gln Pro Gly Ala Arg Ile Phe Ser Phe Asp Gly
        115                 120                 125

Arg Asp Val Leu Arg His Pro Ala Trp Pro Gln Lys Ser Val Trp His
    130                 135                 140

Gly Ser Asp Pro Ser Gly Arg Arg Leu Met Glu Ser Tyr Cys Glu Thr
145                 150                 155                 160

Trp Arg Thr Glu Thr Thr Gly Ala Thr Gly Gln Ala Ser Ser Leu Leu
                165                 170                 175

Ser Gly Arg Leu Leu Glu Gln Lys Ala Ala Ser Cys His Asn Ser Tyr
            180                 185                 190

Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ser Phe Ser Lys
        195                 200                 205
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<213> Mus musculus

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Gly Ser Thr Gly Asp Ala Ala His Thr His Gln Asp Phe Gln Pro Val
            20                  25                  30

Leu His Leu Val Ala Leu Asn Thr Pro Leu
        35                  40
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<210> 4
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<221> CDS
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Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1               5                  10                  15

gca gcc cct cag caa gaa gcg ctc gct cac agc cac cgc gac ttc cag       96
Ala Ala Pro Gln Gln Glu Ala Leu Ala His Ser His Arg Asp Phe Gln
            20                  25                  30

ccg gtg ctc cac ctg gtt gcg ctc aac agc ccc ctg tca ggc ggc atg      144
Pro Val Leu His Leu Val Ala Leu Asn Ser Pro Leu Ser Gly Gly Met
        35                  40                  45

cgg ggc atc cgc ggg gcc gac ttc cag tgc ttc cag cag gcg cgg gcc      192
Arg Gly Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala
    50                  55                  60

gtg ggg ctg gcg ggc acc ttc cgc gcc ttc ctg tcc tcg cgc ctg cag      240
Val Gly Leu Ala Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln
65                  70                  75                  80

gac ctg tac agc atc gtg cgc cgt gcc gac cgc gca gcc gtg ccc atc      288
Asp Leu Tyr Ser Ile Val Arg Arg Ala Asp Arg Ala Ala Val Pro Ile
                85                  90                  95

gtc aac ctc aag gac gag ctg ctg ttt ccc agc tgg gag gct ctg ttc      336
Val Asn Leu Lys Asp Glu Leu Leu Phe Pro Ser Trp Glu Ala Leu Phe
            100                 105                 110

tca ggc tct gag ggt ccg ctg aag ccc ggg gca cgc atc ttc tcc ttt      384
Ser Gly Ser Glu Gly Pro Leu Lys Pro Gly Ala Arg Ile Phe Ser Phe
        115                 120                 125

gac ggc aag gac gtc ctg agg cac ccc acc tgg ccc cag aag agc gtg      432
Asp Gly Lys Asp Val Leu Arg His Pro Thr Trp Pro Gln Lys Ser Val
    130                 135                 140

tgg cat ggc tcg gac ccc aac ggg cgc agg ctg acc gag agc tac tgt      480
Trp His Gly Ser Asp Pro Asn Gly Arg Arg Leu Thr Glu Ser Tyr Cys
145                 150                 155                 160

gag acg tgg cgg acg gag gct ccc tcg gcc acg ggc cag gcc tcc tcg      528
Glu Thr Trp Arg Thr Glu Ala Pro Ser Ala Thr Gly Gln Ala Ser Ser
                165                 170                 175

ctg ctg ggg ggc agg ctc ctg ggg cag agt gcc gcg agc tgc cat cac      576
Leu Leu Gly Gly Arg Leu Leu Gly Gln Ser Ala Ala Ser Cys His His
            180                 185                 190

gcc tac atc gtg ctc tgc att gag aac agc ttc atg act gcc tcc aag      624
Ala Tyr Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ala Ser Lys
        195                 200                 205

tag                                                                  627
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<210> 5
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<212> PRT
<213> Homo sapiens

<400> 5

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
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20 25 30

Pro Val Leu His Leu Val Ala Leu Asn Ser Pro Leu Ser Gly Gly Met
35 40 45

Arg Gly Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala
50 55 60

Val Gly Leu Ala Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln
65 70 75 80

Asp Leu Tyr Ser Ile Val Arg Arg Ala Asp Arg Ala Ala Val Pro Ile
85 90 95

Val Asn Leu Lys Asp Glu Leu Leu Phe Pro Ser Trp Glu Ala Leu Phe
100 105 110

Ser Gly Ser Glu Gly Pro Leu Lys Pro Gly Ala Arg Ile Phe Ser Phe
115 120 125

Asp Gly Lys Asp Val Leu Arg His Pro Thr Trp Pro Gln Lys Ser Val
130 135 140

Trp His Gly Ser Asp Pro Asn Gly Arg Arg Leu Thr Glu Ser Tyr Cys
145 150 155 160

Glu Thr Trp Arg Thr Glu Ala Pro Ser Ala Thr Gly Gln Ala Ser Ser
165 170 175

Leu Leu Gly Gly Arg Leu Leu Gly Gln Ser Ala Ala Ser Cys His His
180 185 190

Ala Tyr Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ala Ser Lys
195 200 205

<210> 6
<211> 35
<212> PRT
<213> Homo sapiens

<400> 6

Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1 5 10 15

Ala Ala Pro Gln Gln Glu Ala Leu Ala His Ser His Arg Asp Phe Gln
20 25 30

Pro Val Leu
35

<210> 7
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<213> Homo sapiens

<400> 7

Ala Pro Gln Gln Glu Ala Leu Ala
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<210> 8
<211> 38
<212> DNA
<213> Artificial Sequence

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<400> 8
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<210> 9
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<212> DNA
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<400> 9
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<210> 10
<211> 20
<212> DNA

<213> Artificial Sequence

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<400> 10
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<210> 11
<211> 26
<212> DNA
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<220>
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<400> 11
ctgatgagta tgggccgcac cagtgg 26

<210> 12
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<212> DNA
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<220>
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<400> 12
ctgatgagta tgggccgcgt caccagtgg 29

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<212> DNA
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<220>
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<400> 13
ttttttttttc agtgtaaaag gtc 23

<210> 14
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<212> DNA
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<220>
<223> Primer

<400> 14
cagatgacat cctggccag 19

<210> 15
<211> 22
<212> DNA
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<220>
<223> Primer

<400> 15
ctatacagga aagtatggca gc 22

<210> 16
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<213> Artificial Sequence

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<223> Sense oligonucleotide

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cagcccctca gcaagaagcg ctcgctcaca gccaccgcga cttccagccg gtgctcca 118

<210> 17
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<213> Artificial Sequence

<220>
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<400> 17
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ctgccagagc cctcccggcc aggcaaagga gaaagaagat ccaggccctc atggaagctt 120

ggc 123